

***FlyBy Math™* Alignment**  
**South Dakota Mathematics Content Standards**  
**May 17, 2004**

### Algebra Standards

#### Indicator 3: Interpret and develop mathematical models.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
5.A.3.2. (Application) Students are able to identify information and apply it to a given formula.	--Use the distance-rate-time formula to predict and analyze aircraft conflicts.

#### Indicator 4: Describe and use the properties and behaviors of relations, functions, and inverses.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
5.A.4.1. (Application) Students are able to solve problems using patterns involving more than one operation.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

### Geometry Standards

#### Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
5.G.2.3. (Application) Students are able to use two-dimensional coordinate grids to find locations and represent points and simple figures.	--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

### Measurement Standards

#### Indicator 1: Apply measurement concepts in practical applications.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
5.M.1.1. (Comprehension) Students are able to determine elapsed time within an a.m. or p.m. period on the quarter-hour.	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.
5.M.1.4. (Application) Students are able to use appropriate tools to measure length, weight, temperature, and area in problem solving.	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

## Number Sense Standards

**Indicator 3: Develop conjectures, predictions, or estimations in the process of problem solving and verify or justify the results.**

### Standard and Supporting Skills

5.N.3.1. (Application)  
Students are able to use different estimation strategies to solve problems involving whole numbers, decimals, and fractions to the nearest whole number.

### *FlyBy Math™* Activities

--Predict outcomes and explain results of mathematical models and experiments.

## Statistics and Probability Standards

**Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.**

### Standard and Supporting Skills

5.S.1.1. (Application)  
Students are able to gather, graph, and interpret data.

### *FlyBy Math™* Activities

--Conduct simulation and measurement for several aircraft conflict problems.

--Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.

--Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.